



## Drafting/Design Architecture Skill Standards Checklist

<b>CERTIFICATION AREAS COMPLETED:</b>	<b>Student Name</b> _____
_____ Core Abilities	<b>School District</b> _____
_____ Computer Aided Drafting	<b>YA Consortium</b> _____
_____ Part 1	<b>YA Coordinator</b> _____
_____ Part 2	
_____ Architectural Construction Documentation	
_____ Materials and Methods of Construction	<b>High School Diploma/GED/HSED</b>
_____ A minimum of 900 work hours	<b>Date Received</b> _____

**Level One Requirements:** Complete Core Abilities and Computer Aided Drafting ***OR*** Core Abilities, Architectural Construction Documentation and Materials and Methods of Construction. A minimum of 450 work hours.

<b>Total Hours Employed</b>	<b>Company Name</b>	<b>Phone #</b>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

## **Instruction for the Worksite Mentor**

The Skill Standards Checklist is a list of competencies (tasks) to be achieved through mentoring at the worksite.

- Each competency has three levels.
- The worksite mentor should rate each competency as the student acquires and demonstrates the skill.
- A competency may be revisited and the score raised as the student becomes more proficient at the worksite.
- The mentor and the student should go over the checklist together on a regular basis (at a minimum every 9 weeks) to record progress and plan future steps to complete the required competencies.

*Please sign this page if you have been a mentor, trainer or instructor of this student.*

**CERTIFICATION:** I certify that this student has successfully completed the competencies required in my department.

_____	<b>Mentor/Trainer Signature</b>	_____	Printed Name
_____	Department	_____	Date Signed
_____	<b>Mentor/Trainer Signature</b>	_____	Printed Name
_____	Department	_____	Date Signed
_____	<b>Mentor/Trainer Signature</b>	_____	Printed Name
_____	Department	_____	Date Signed
_____	<b>Mentor/Trainer Signature</b>	_____	Printed Name
_____	Department	_____	Date Signed
_____	<b>Mentor/Trainer Signature</b>	_____	Printed Name
_____	Department	_____	Date Signed
_____	<b>Instructor Signature</b>	_____	Printed Name
_____	Department	_____	Date Signed
_____	<b>Instructor Signature</b>	_____	Printed Name
_____	Department	_____	Date Signed

## Core Abilities

## Required

Core abilities address broad knowledge, skills, and attitudes that go beyond the context of a specific course. These standards are not taught in specific lessons. These are the employability skills that are critical for success in the drafting/design industry.

### RATING:

**3 = Consistently displays this behavior**

**2 = Often displays this behavior**

**1 = Rarely displays this behavior**

		<u>Score</u>		
1.	Communicates clearly with supervisor and others	3	2	1
2.	Acts professionally	3	2	1
3.	Learns effectively	3	2	1
4.	Manages self responsibly	3	2	1
5.	Plans for changes (flexibility and adaptability)	3	2	1
6.	Plans for personal and professional growth	3	2	1
7.	Works productively	3	2	1
*8.	Recognizes safe and unsafe procedures	*3	2	1
*9.	Demonstrates proper safety procedures	*3	2	1
*10.	Maintains a safe and healthy work environment	*3	2	1

**All competencies in this section must be rated 2 or higher  
All \* items must be completed at a 3 rating**

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

# Computer Aided Drafting – Part 1

## RATING:

**3 = Able to perform entry-level skills. Has performed job during training program; limited additional training/supervision may be required.**

**2 = Has performed job during training program; additional training is required to develop entry-level skills.**

**1 = Is familiar with process, but is unable to perform job with entry-level skills.**

		<u>Score</u>		
*1.	Examine the role of drawings in industry	*3	2	1
2.	Explore mechanical design/engineering/architectural careers	3	2	1
3.	Apply geometric construction in the solution of drawing problems	3	2	1
*4.	Use the basic functions of CAD software and file management	*3	2	1
5.	Use CAD coordinate systems	3	2	1
*6.	Use drawing aids and enhancements	*3	2	1
*7.	Layout one-view drawings	*3	2	1
*8.	Create geometric entities on a drawing	*3	2	1
*9.	Use CAD editing commands	*3	2	1
*10.	Use electronic printers, plotters, lettering devices to produce prints	*3	2	1
*11.	Apply the principles of orthographic projection in the creation of a drawing	*3	2	1
12.	Interpret auxiliary drawing information	3	2	1
*13.	Dimension a drawing	*3	2	1
14.	Sketch pictorial drawings	3	2	1
15.	Create an isometric drawing	3	2	1

**All competencies must be rated  
Competencies 1 through 13 must be rated at a level 2 or higher  
All \* competencies must be rated at a level 3**

**Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Computer Aided Drafting – Part 2

### RATING:

**3 = Able to perform entry-level skills. Has performed job during training program; limited additional training/supervision may be required.**

**2 = Has performed job during training program; additional training is required to develop entry-level skills.**

**1 = Is familiar with process, but is unable to perform job with entry-level skills.**

		<u>Score</u>		
*1.	Draw a section view	*3	2	1
*2.	Construct a primary auxiliary (detail) view	*3	2	1
3.	Create assembly drawings	3	2	1
4.	Interpret product specifications	3	2	1
5.	Analyze part prints	3	2	1
6.	Interpret (geometric) dimensioning and tolerancing symbols	3	2	1
7.	Participate in the design process	3	2	1

**All competencies must be rated  
All \* competencies must be rated at a level 3**

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Architectural Construction Documentation

## RATING:

**3 = Able to perform entry-level skills. Has performed job during training program; limited additional training/supervision may be required.**

**2 = Has performed job during training program; additional training is required to develop entry-level skills.**

**1 = Is familiar with process, but is unable to perform job with entry-level skills.**

		<u>Score</u>		
1.	Understands construction written and graphic language	3	2	1
2.	Apply dimensioning techniques	3	2	1
3.	Check, revise and record drawings	3	2	1
4.	Create floor plans	3	2	1
5.	Create building elevation drawings	3	2	1
6.	Create building section view drawings	3	2	1
7.	Create building detail drawings and alignment tools	3	2	1
8.	Create interior elevation drawings	3	2	1
9.	Identify structural components of a building	3	2	1
10.	Create structural drawings	3	2	1
11.	Understands foundation systems	3	2	1
12.	Understands heating, ventilating and air conditioning plans	3	2	1
13.	Create electrical plans	3	2	1
14.	Understands plumbing plans	3	2	1
15.	Create roof plan layouts	3	2	1
16.	Create specialty drawings used within the industry, bubble diagrams, contour maps, schematic drawings	3	2	1

\_\_\_\_\_ **Total # of Competencies rated 2 or higher (14 Required)**

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# Materials and Methods of Construction

## RATING:

**3 = Able to perform entry-level skills. Has performed job during training program; limited additional training/supervision may be required.**

**2 = Has performed job during training program; additional training is required to develop entry-level skills.**

**1 = Is familiar with process, but is unable to perform job with entry-level skills.**

	<u>Score</u>		
1. Identify various framing methods	3	2	1
2. Calculate design criteria for structural loading	3	2	1
3. Calculate sizing for joists and rafters using span tables	3	2	1
4. Calculate sizing and patterns for simple beams	3	2	1
5. Create framing plans	3	2	1
6. Understands building codes and project requirements	3	2	1
7. Understands legal descriptions and plot plan requirements	3	2	1
8. Participate in a site survey	3	2	1
9. Create civil/site orientation drawings	3	2	1
10. Create plot plan layout	3	2	1
11. Understands energy-efficient design in construction	3	2	1
12. Apply rendering techniques to drawings	3	2	1
13. Develop a project portfolio	3	2	1
14. Make a formal presentation	3	2	1
15. Build models/prototype	3	2	1
16. Understand and apply quality concepts/standards	3	2	1
17. Document through a technical report project recommendations	3	2	1
18. Demonstrates teamwork skills	3	2	1

\_\_\_\_\_ **Total # of Competencies rated 2 or higher (16 Required)**

**Comments:** \_\_\_\_\_

[illegible][illegible]

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## Notes

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